171776

0 004

A

LETTER REPORT
FOR
MICHCON "H"
DETROIT, WAYNE COUNTY, MICHIGAN
TDD S05-9801-020
PAN 8J2001SIXX

March 30, 1998

Prepared for:

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Emergency Response Branch
77 West Jackson Boulevard
Chicago, Illinois 60604

Prepared by: [signature] for Mark Ramaly Date: 3/30/98
Mark A. Ramaly, START Project Manager

Reviewed by: [signature] for Mary Jane Ripp Date: 3/30/98
Mary Jane Ripp, START Assistant Program Manager

Approved by: [signature] Date: 3/30/98
Michael L. Dieckhaus, START Assistant Program Manager

ecology and environment, inc.
12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900
International Specialists in the Environment

recycled paper

ecology and environment, inc.
12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900
International Specialists in the Environment

March 30, 1998

Ms. Gail Nabasny
START Project Officer
Emergency Support Section
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604

Re: MichCon "H"
Detroit, Wayne County, Michigan
TDD S05-9801-020
PAN 8J2001SIXX

Dear Ms. Nabasny:

On January 29, 1998, the United States Environmental Protection Agency (U.S. EPA) tasked the Ecology and Environment, Inc. (E & E), Superfund Technical Assessment and Response Team (START), under Technical Direction Document (TDD) S05-9801-020, to perform a site assessment at the MichCon "H" (MCH) site in Detroit, Wayne County, Michigan. Tasks to be completed under the TDD included:

- Obtain and review existing site, facility, and/or release data provided by U.S. EPA;
- Review files of state and local authorities, other Federal agencies, and interested parties;
- Conduct a site visit;
- Document site conditions with written and visual documentation;
- Assess the site for an immediate threat to public health or the environment; the potential need for a removal action, further investigation, no further investigation, no further action, state referral, and/or referral to other Federal agencies or U.S. EPA programs;
- Determine site characteristics;
- Determine pollution dispersal pathways;
- Develop a health and safety plan for field activities;
- Conduct sampling activities on site;
- Schedule and provide for analytical support;
- Perform air monitoring; and
- Perform analytical data validation.

These activities were performed at the MCH site to evaluate the site's threat to human health and the environment based on Title 40 Code of Federal Regulations (CFR) 300.415, National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The site was referred to U.S. EPA by the City of Detroit Department of Environmental Affairs (CDEA), pursuant to reports of visible drums having been buried among piles of debris. The START members conducting site assessment activities with the U.S EPA On-Scene Coordinator (OSC) Ralph Dollhopf, were Michael Dieckhaus, Erin Busby, and Mark Ramaly. Photodocumentation of the MCH site is presented in Attachment A.

The MCH site is located at 201 South Green Avenue, Detroit, Wayne County, Michigan (latitude 42°18'1" N and longitude 83°6'19" W)(Attachment B, Figure 1). The site is approximately 3.8 acres in size and consists of four separate properties which are located in an urban\industrial area of Detroit. The site is bordered to the northwest by Chesapeake and Ohio Railroad tracks, to the northeast by Post Street, to the southeast by a commercial business, and to the southwest by South Green Avenue and a commercial produce distributor (Attachment B, Figure 2). The nearest residential areas are located approximately 0.25 miles south and southeast of the site. Southwestern High School is located at the southeastern corner of Post and Fort Streets; approximately 500 feet northeast of the site.

The site was owned and operated by the Detroit City Gas Company (DCGC) between 1913 and 1945, and served as a carburetted water gasification plant. DCGC is currently known as Michigan Consolidated Gas Company (MichCon). Operations at the site ceased in 1945, and the one large property was sold to the American Charcoal Company (ACC). ACC operated at the site between 1946 and 1976. In 1976, the site was sold to the A and A Scrap Iron Metal Company (A & A). A & A utilized the site as a scrap metal storage and processing facility until 1995, when the site reverted to the State of Michigan due to nonpayment of property taxes. According to CDEA personnel, the City of Detroit obtained the property from the State of Michigan for Brownsfield redevelopment in November 1997. Although the main portion of the site was sold by MichCon in 1946, MichCon currently owns two small parcels on the site. One parcel which is located on the northwestern portion of the site paralleling the railroad tracks was retained by MichCon due to an underlying natural gas line. The second parcel, located at the western corner of the site, was the former location of a natural gas regulator station. The southeastern portion of the site was the former location of a railroad spur, and the present owner of this area is not known.

In August 1984, EDI Engineering and Science (EDI), which was retained by MichCon, conducted an initial site investigation. The scope of the investigation included assessing the air, surface and subsurface soils, and groundwater conditions at the site. Analytical results indicated that the surface soils contained elevated total lead concentrations as high as 1,500 milligrams per kilogram (mg/kg). Groundwater contained elevated concentrations of several inorganic contaminants including: 15 milligrams per liter (mg/L) cyanide, 0.13 mg/L cadmium, 0.13 mg/L chromium, 1.5 mg/L lead, and 0.65 mg/L nickel. Analyses of groundwater samples also indicated elevated concentrations of numerous polynuclear aromatic hydrocarbons (PAHs) including: 8.8 mg/L fluoranthene, 5.2 mg/L benzo(k)fluoranthene, 8.0 mg/L benzo(a)anthracene, and 8.7 mg/L phenanthrene. EDI concluded that the contaminated aquifer was not used as a drinking water source and that the saturated soils were low in permeability and were restricting the migration of contaminants. At the time of the investigation, EDI estimated that groundwater contaminants may have migrated with the groundwater flow to 100 to 200 feet east of the site.

The City of Detroit has scheduled the buildings on site for demolition in 1999. Prior to 1997, the buildings contained drums of unknown contents. The Michigan Department of Environmental Quality (MDEQ) conducted a limited removal of surface drums inside the buildings and scattered throughout site areas. On November 10, 1997, MDEQ removed 37 drums containing various materials, including oils, resins, paint sludges, petroleum distillates, and phosphoric acid.

On February 3, 1998, START met with Ed Novak of MDEQ and conducted a site reconnaissance. START observed that the site consisted of two brick buildings, a concrete pad and building foundation, and three piles of soil and debris. The three piles contained soil, various types of construction debris, and other waste. Many drums were visible in each pile. Many ground areas appeared to be disturbed and were possible areas of buried waste. The lack of fencing on the northeastern side of the site and the absence of gates on the southwestern side allowed for unrestricted access to the site. In addition to the three waste piles, the site was littered with various wastes, including piles of tires and roofing materials, pieces of concrete and brick, automobile fuel tanks, and empty fuel oil tanks.

The two brick buildings were located on the western corner of the property. Building 1 contained construction debris and appeared to have been damaged by fire. Building 2 contained municipal waste and construction debris. A concrete pad and building foundation were located northeast of Building 1 and southwest of Building 2. This pad was covered with roofing shingles and debris. The area northeast of Building 2 was littered with various debris, including shingles, roofing debris, tires, and a reddish-brown solid pile.

Pile 1 was located on the southwestern corner of the site and consisted of black granular soil, carpeting, bricks, concrete debris, wood, and wooden pallets. Approximately ten 55-gallon steel drums were visible on the southeastern side of the pile. Six of these were lying on their sides beneath the pile. Many of the drums were rusted and deteriorated. Two drums contained a black tar or resin-like material which had migrated from the drums down the pile. Pile 1 was approximately 40 feet by 35 feet in area and 12 feet in height.

Pile 2, which was located approximately 200 feet northeast of Pile 1, consisted of tires, concrete and metal debris, red bricks, and black topsoil. Two partially buried drums were visible on the southeastern and western sides of the pile. Trees and grass were growing on the pile. Pile 2 was approximately 30 feet by 18 feet in area and 8 feet in height.

Pile 3, which was Y-shaped, was located on the southeastern corner of the site, and a high-voltage electrical tower was located in the center. The pile consisted of black topsoil, sand, gravel, concrete, wood, roofing material, bricks, carpeting, tires, rubber, and other debris. The northwestern portion of the pile consisted primarily of automobile fuel tanks and rusted of 1-gallon and 5-gallon containers. Dried yellow solids were visible inside the small containers and on the pile. In addition to various debris, several rusted 5-gallon containers, empty drum carcasses, and six partially buried drums were located on the northeastern side of the pile. Pile 3 was approximately 160 feet from east to west by 60 feet from north to south in area, and 10 feet in height.

The southeastern portion of the site appeared to be a former railroad spur which was covered with drums and debris. The railroad spur split from the Chesapeake and Ohio Railroad line and entered the site at the northern corner. The spur appeared to have extended across the site towards the southwestern corner and across South Green Avenue. A semitrailer filled and surrounded by tires was located at the southwestern corner of the site. One 55-gallon drum was observed among the tires near the semitrailer. Approximately five rusty 55-gallon drums with contents were scattered along the southeastern border of the site. Two additional drums were located approximately 10 feet southwest of Post Street. These drums were lying on their sides and labeled, "Agitene, Parts Cleaner" and "Combustible Mixture," and both drums were rusted and deteriorating. One of the drum's top had a lid that was completely corroded and open.

On February 4, 1998, OSC Dollhopf and START members Michael Dieckhaus and Erin Busby visited the site to conduct an additional reconnaissance. During this reconnaissance, two rusted and decayed capacitors were observed beneath the high voltage power line tower. The capacitors appeared to be old and possibly contained polychlorinated biphenyls (PCBs). Soils immediately surrounding one of the capacitors appeared to be stained with oil.

On February 6, 1998, per U.S. EPA request, START revisited the site to attempt to sample oil from the capacitors and stained soils. START documented the physical conditions, locations, and orientations of the capacitors. Both capacitors were approximately 1 foot by 1 foot by 4 inches and had terminals on one end. The capacitors were rusted, and the terminals were black and charred. The terminals were brittle and broken. START donned level B personal protective equipment and began sampling. Each capacitor was lifted onto a precut section of Visqueen, and the underlying soils were sampled. START observed that the soil directly beneath Capacitor 1 was stained with oil. Sample S-1 was collected from

soil located beneath Capacitor 1, and sample S-2 was collected from soil located beneath Capacitor 2 (Attachment B, Figure 3). START utilized a metal spike and hammer to gain access to the interior of the capacitors. Neither capacitor contained liquids. A black flaky residue was present on the interiors of both capacitors and the broken exterior portion of Capacitor 1. START collected approximately 1 ounce of the flaky residue and composited it with sample S-1. No material was collected from the interior of Capacitor 2. Following sampling activities, START wrapped each capacitor in Visqueen and placed them in a lined 30-gallon steel drum and affixed applicable PCB warning labels.

The samples were shipped to Environmental Control Laboratories, Stongsville, Ohio, for PCB analyses under analytical TDD S05-9802-803. Sample results indicated sample S-1 contained 100,000 mg/kg or 10% PCB Arochlor 1254. PCB concentrations in sample S-2 were below detection limits (Attachment C). According to the MDEQ Generic Industrial Cleanup Criteria, Revision 2, the maximum allowable direct contact level for PCBs in soils is 21.0 mg/kg.

Conditions at the MCH site constitute an imminent and substantial threat to public, health, welfare, or the environment based upon factors set forth in the NCP, Title 40 CFR, Section 300.415, Paragraph (b)(2), Subsections i, iii, iv, and v. Approximately forty 55-gallon drums with unknown contents were visible throughout the site. Several of the drums were partially buried within piles located on site. Based on the sizes of the piles, additional drums may be present. Based upon the types of materials encountered during the 1997 MDEQ drum removal, drums without labeling or markings may contain flammable and/or corrosive materials. Incompatible materials in drums may be stored near each other and may react violently if mixed. Evidence of soil staining beneath a capacitor indicates the contents of the capacitors have leaked onto the ground. A composite residue and soil sample contained high levels of PCBs.

During the February 3, 1998, site reconnaissance, START observed the presence of animals on site. Many large dog tracks and one rabbit were observed on site. Residences and a high school were located in close proximity to the site. During the assessment, numerous individuals were observed walking by the site on Post Street. The site was unsecured and readily accessible due to the lack of gates on the southwestern side and lack of fencing on the northeastern side. Trespassers and animals may contact hazardous materials and disturb drums and their contents. The MCH site may be a source of actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

All drums were located in uncovered areas. Many of the drums were lying on their sides and in a state of deterioration. Hazardous substances, pollutants, or contaminants in drums may be released.

Weather conditions may cause hazardous substances, pollutants, or contaminants at the MCH site to migrate or be released. All of the drums and capacitors were located in uncovered areas and subjected to weather. Heavy rains could cause open drums to fill and the contents to overflow. Precipitation and extreme temperatures may cause containers to further deteriorate and release their contents. The PCB-contaminated soils are unprotected from precipitation. Continued precipitation may cause further migration of PCBs.

Analytical results indicated that surface soils contained elevated levels of PCBs in the percentile range. These results were obtained from a sample composited from soils beneath a capacitor and residue from the capacitor. Historically, older capacitors contained oil with PCBs. There was evidence of soil staining beneath this capacitor, and both capacitors were empty. A threat of PCBs in surface soils that may migrate exists at the MCH site.

The preparation of this Letter Report, with included attachments, completes the tasks specified by this TDD. If you have any questions or need additional information, please contact our office.

Sincerely,

Mark A. Ramaly
START Project Manager

Michael L. Dieckhaus
START Assistant Program Manager

Attachments: A - Photodocumentation
B - Site Illustrations
C - Data Validation Memoranda

cc: Ralph Dollhopf, OSC, U.S. EPA
Site File

Attachment A

Photodocumentation

Site: MichCon "H"
Photo No: 1 (R1F1)
Direction: North
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: View of southwestern side of site and Building 1 from South Green Avenue.

Site: MichCon "H"
Photo No: 2 (R1F2)
Direction: Southeast
Camera: Minolta 35mm
Photographer: Mark Ramaly

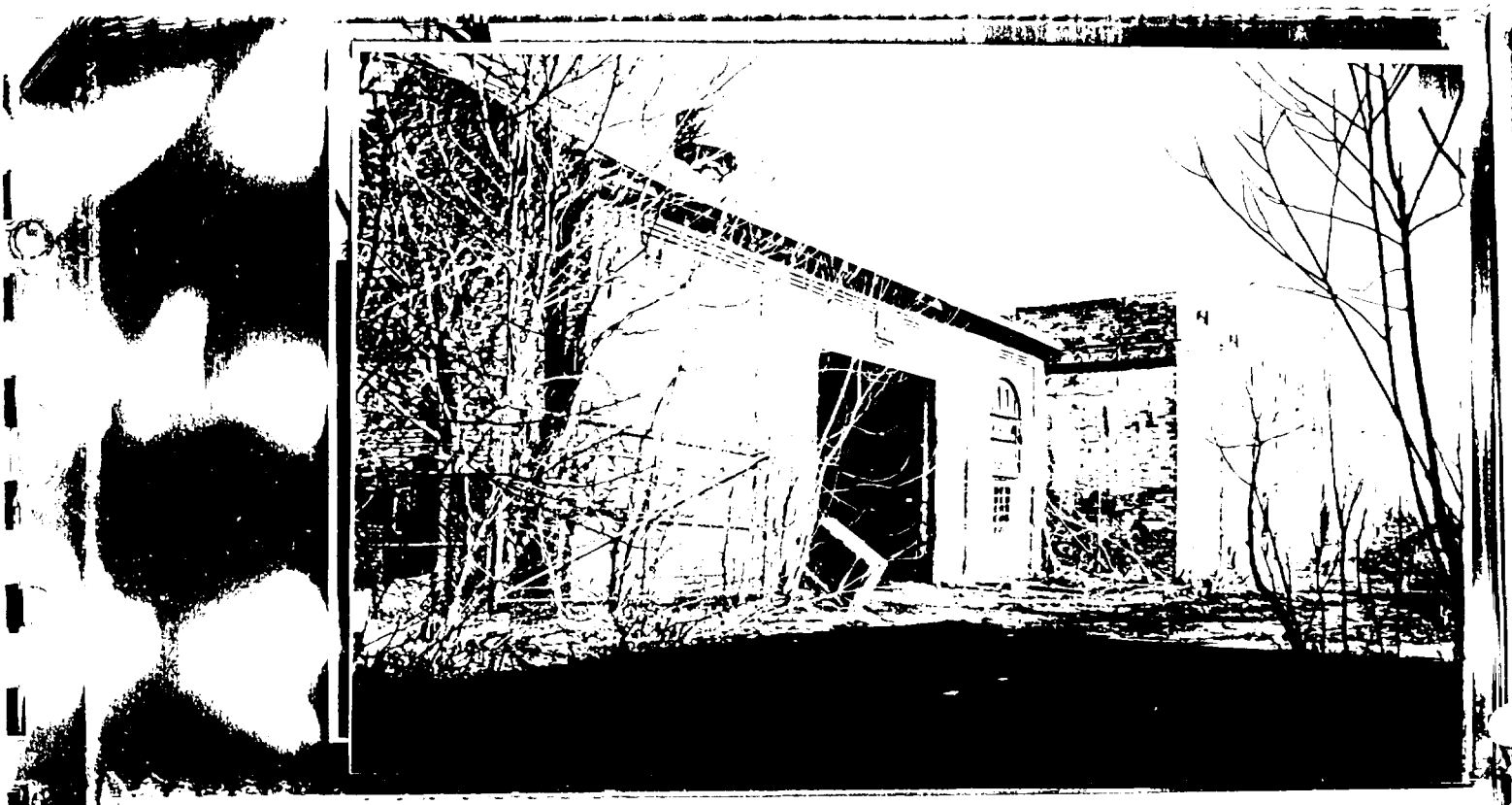
Date: 2/3/98
Subject: View of southwestern side of site from South Green Avenue.

Site: MichCon "H"
Photo No: 3 (R2F5)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Southeastern side of Building 1. Note roofing debris and tires littering the site.

Site: MichCon "H"
Photo No: 4 (R2F3)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Northwestern and northeastern sides of Building 1.



Site: MichCon "H"
Photo No: 5 (R2F4)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Western portion of Building 2.

Site: MichCon "H"
Photo No: 6 (R2F2)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Eastern portion of Building 2. Note construction debris scattered around the building.

Site: MichCon "H"
Photo No: 7 (R1F23)
Direction: West
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Southwestern side of the site and Building 2. Note tires, roofing debris, and miscellaneous debris littering the site.

Site: MichCon "H"
Photo No: 8 (R1F22)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Northwestern side of the site. Note numerous debris piles.

Site: MichCon "H"
Photo No: 9 (R1F21)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

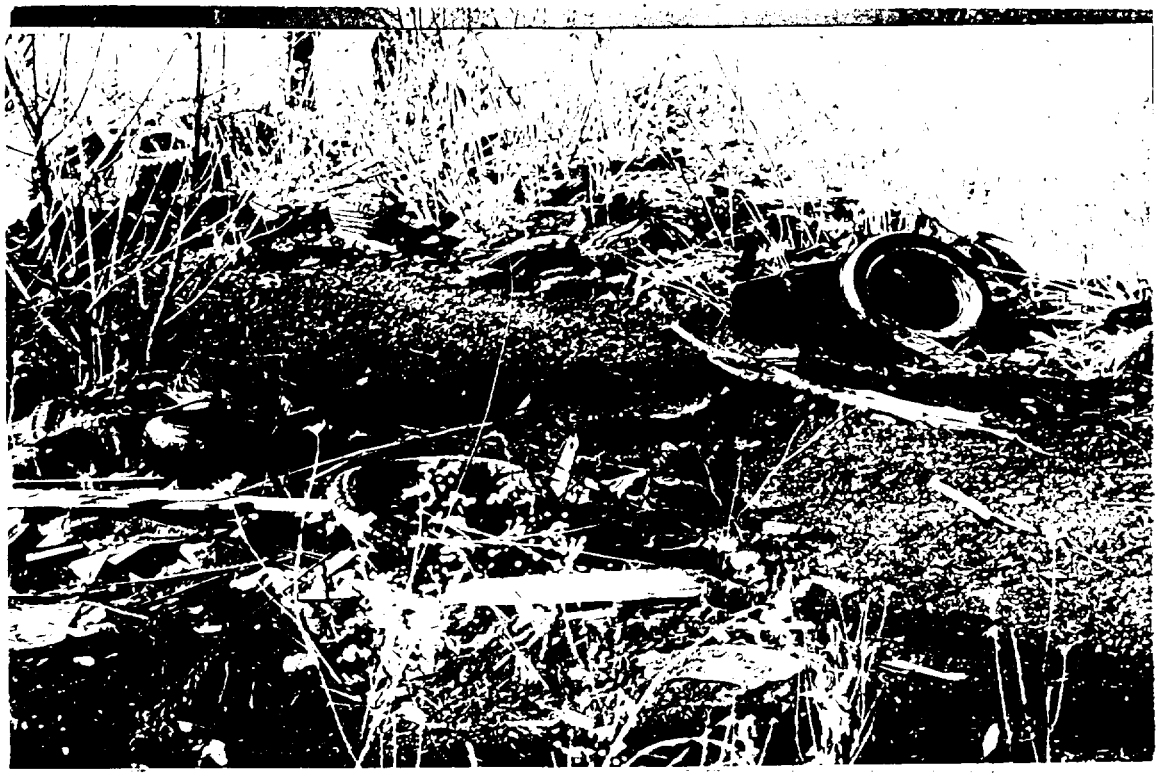
Date: 2/3/98
Subject: Northwestern side of the site. Note numerous debris piles consisting of roofing shingles.

Site: MichCon "H"
Photo No: 10 (R1F20)
Direction: North
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Northerr corner of site. Note partial fencing denoting former location of a railroad spur.

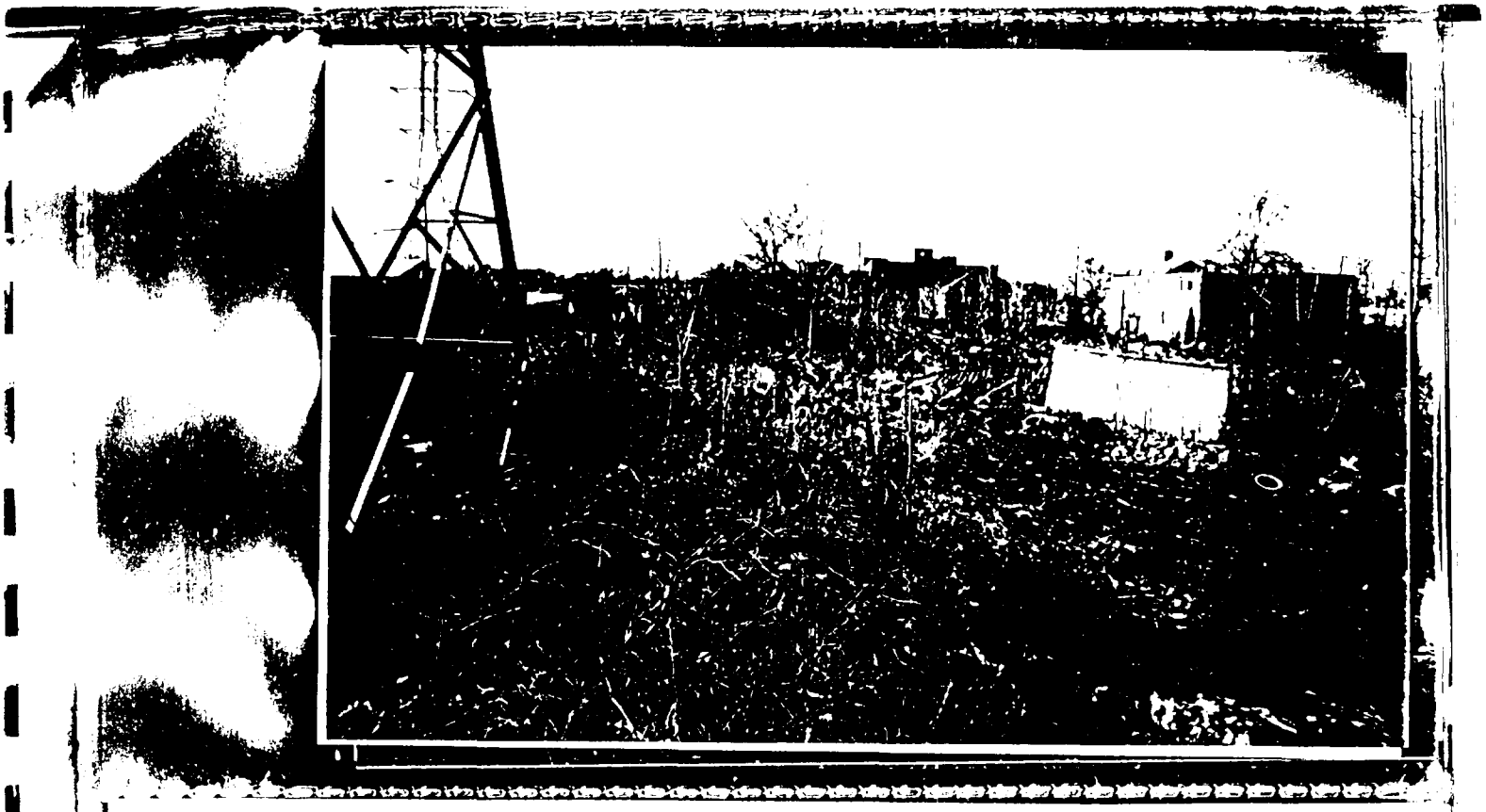
Site: MichCon "H"
Photo No: 11 (R1F19)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Northwestern side of the site.



Site: MichCon "H"
Photo No: 12 (R1F11)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Tire debris and black granular soil located northwest of Pile 3.



Site: MichCon "H"
Photo No: 13 (R1F18)
Direction: Southwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: View of southeastern side of the site from Pile 3. Southeastern side of the site was the location of a former railroad spur

Site: MichCon "H"
Photo No: 14 (R1F7)
Direction: Northeast
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Southeastern side of the site from the former railroad spur area. Note the drums and the high voltage power line.

Site: MichCon "H"
Photo No: 15 (R1F6)
Direction: Southwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: View of the southeastern side of the site from the former railroad spur. Note the semitrailer located at the southern corner of the site.

Site: MichCon "H"
Photo No: 16 (R1F3)
Direction: Southeast
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Semitrailer filled and surrounded by tires and debris at southern corner of site. Note drum mixed with debris.

Site: MichCon "H"
Photo No: 17 (R2F8)
Direction: Southwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

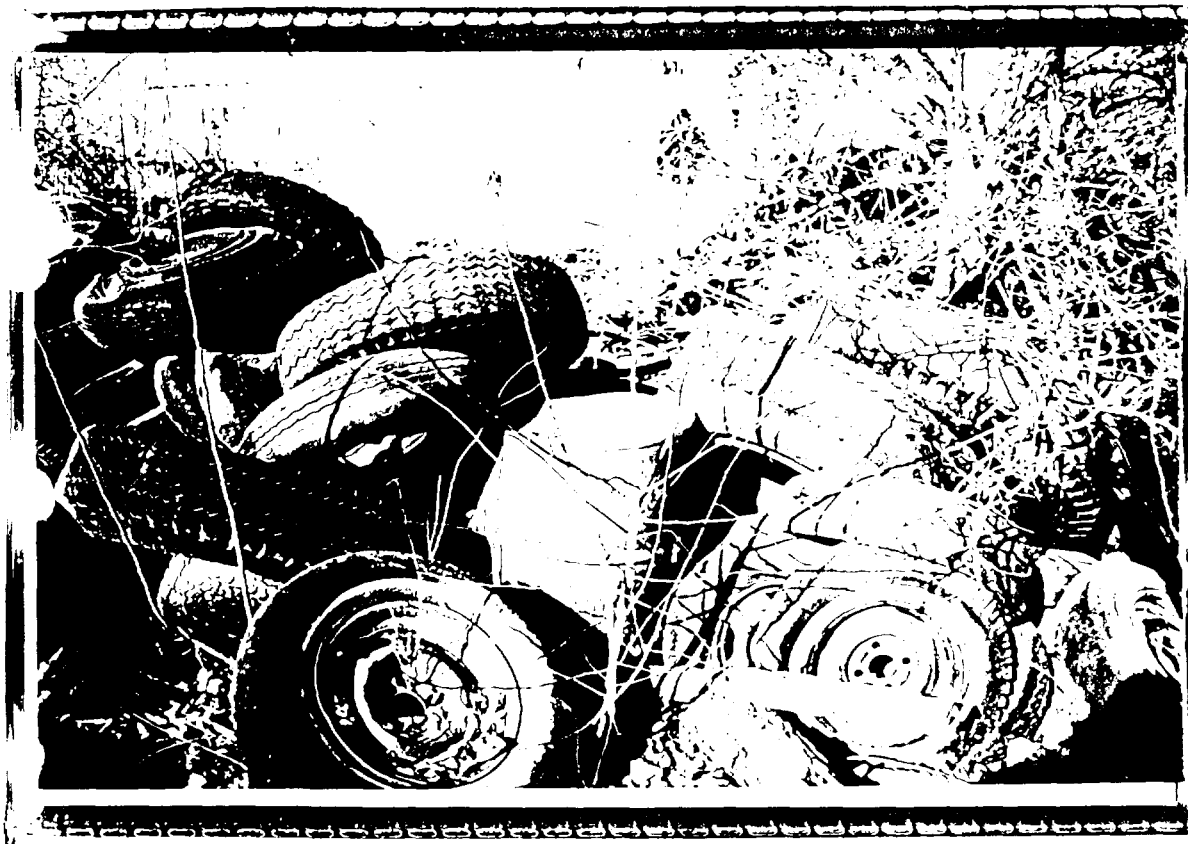
Date: 2/3/98
Subject: View of the northern side of Pile 1.

Site: MichCon "H"
Photo No: 18 (R1F4)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Drums located at the base of the southeastern side of Pile 1.

Site: MichCon "H"
Photo No: 19 (R1F11)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Pile of tires located southwest of Pile 2. Note drum among tires.



Site: MichCon "H"
Photo No: 20 (R1F8)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Rusted drum within a pile of tires located southwest of Pile 2.

Site: MichCon "H"
Photo No: 21 (R1F24)
Direction: South
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: 55-gallon drum carcasses and 5-gallon pails

Date: 2/3/98
Subject: Northern side of Pile 2.

Site: MichCon "H"
Photo No: 22 (R1F9)
Direction: East
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Two drums containing material located at the

Date: 2/3/98
Subject: Southwestern portion of Pile 3. Note tires and debris scattered throughout the pile.

Site: MichCon "H"
Photo No: 23 (R1F10)
Direction: East
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Northern portion of Pile 3. Note high voltage tower near Pile 3.

Site: MichCon "H"
Photo No: 24 (R1F16)
Direction: Northwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: View of northeastern side of Pile 3. Note drum carcasses and various debris.

Site: MichCon "H"
Photo No: 25 (R1F17)
Direction: Southwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: 55-gallon drum carcasses and 5-gallon pails located on northeastern portion of Pile 3.

Site: MichCon "H"
Photo No: 26 (R1F15)
Direction: Southwest
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Two drums containing material located at the eastern corner of the site. Both drums are marked "Agitene".

Site: MichCon "H"

Site: MichCon "H"
Photo No: 27 (R1F14)
Direction: East
Camera: Minolta 35mm
Photographer: Mark Ramaly

Date: 2/3/98
Subject: Drum marked "Agitene" and "Combustible Mixture" located at the eastern corner of the site.

Site: MichCon "H"

Site: MichCon "H"
Photo No: 28 (R3F0)
Direction: East
Camera: Olympus 35mm
Photographer: Mark Ramaly

Date: 2/6/98
Subject: Capacitor 1 located beneath high voltage tower.

Site: MichCon "H"
Photo No: 29 (R3F1)
Direction: Southeast
Camera: Olympus 35mm
Photographer: Mark Ramaly

Date: 2/6/98
Subject: Capacitor 2 located beneath high voltage tower.

Site: MichCon "H"
Photo No: 30 (R3F2)
Direction: East
Camera: Olympus 35mm
Photographer: Mark Ramaly

Date: 2/6/98
Subject: Capacitor 1 following attempt to sample oil.

Site: MichCon "H"
Photo No: 31 (R3F3)
Direction: East
Camera: Olympus 35mm
Photographer: Mark Ramaly

Date: 2/6/98
Subject: Location of Capacitor 1 and location of soil sample S-1.

Site: MichCon "H"
Photo No: 32 (R3F4)
Direction: South
Camera: Olympus 35mm
Photographer: Mark Ramaly

Date: 2/6/98
Subject: Location of Capacitor 2 and the location of soil sample S-2.

Site: MichCon "H"
Photo No: 33 (R3F5)
Direction: Southwest
Camera: Olympus 35mm
Photographer: Mark Ramaly

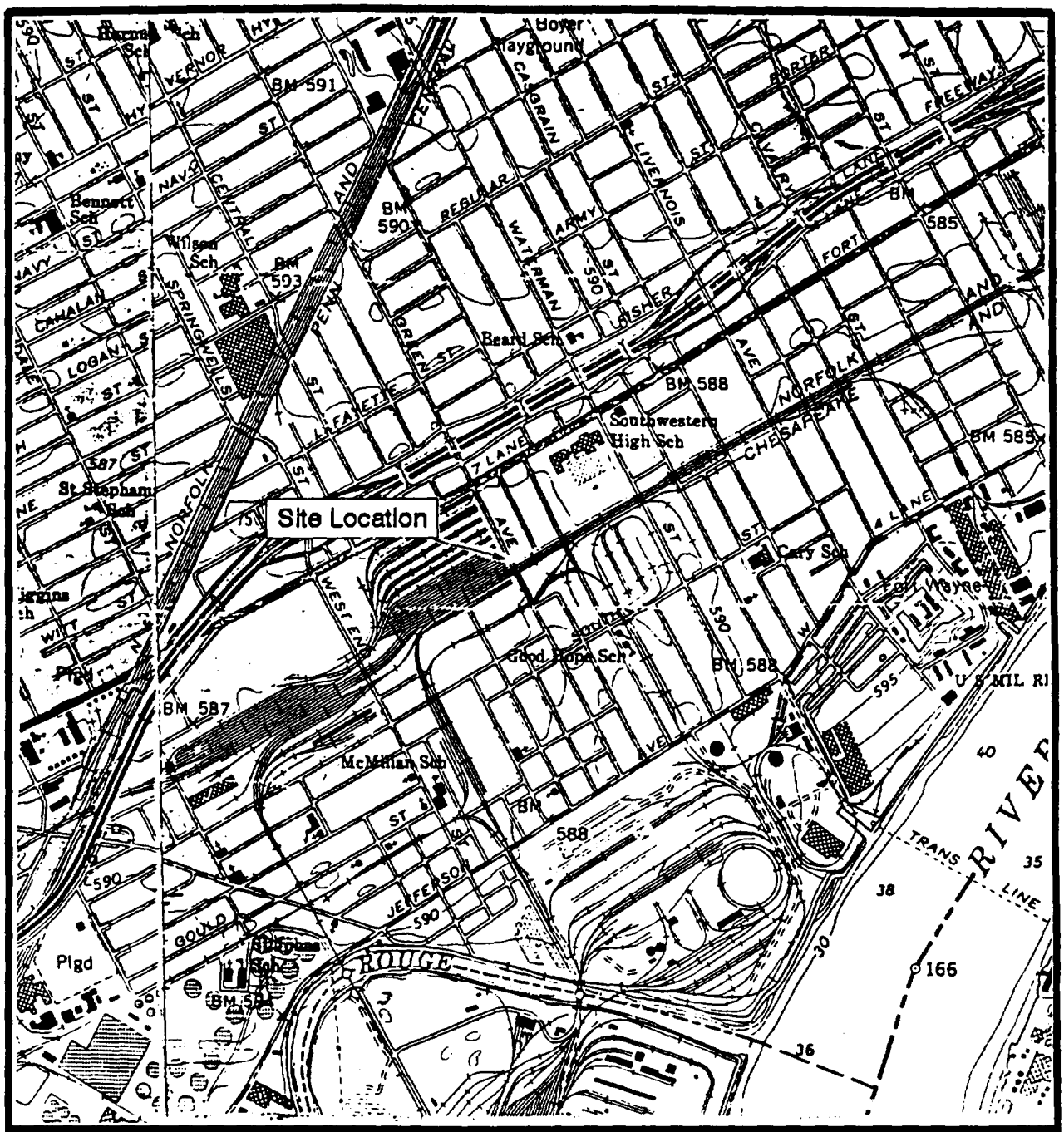
Date: 2/6/98
Subject: Lined 30-gallon steel drum used to overpack capacitors.

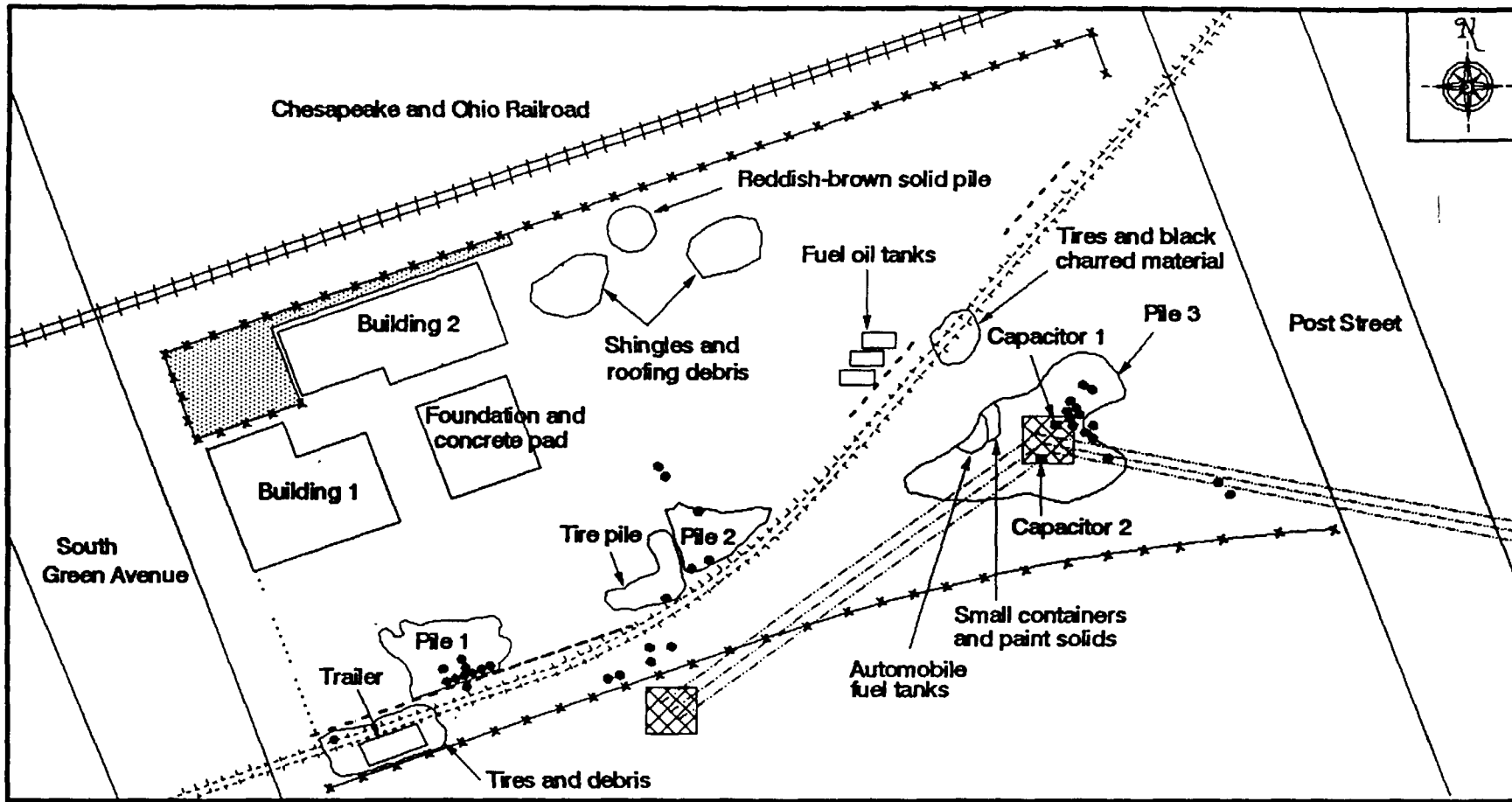
Site: MichCon "H"
Photo No: 34 (R3F6)
Direction: East
Camera: Olympus 35mm
Photographer: Mark Ramaly

Date: 2/6/98
Subject: Area beneath high voltage tower. Note flags marking sampling locations and initial locations of the capacitors.

Attachment B

Site Illustrations


Site Location
Michigan
Detroit
N
ecology and environment, Inc.
Superfund Technical Assessment and Response Team
Region 5
TITLE
Site Location Map
FIGURE
1
SITE
MichCon "H"
SCALE
1:17,280
SOURCE/DATE
USGS 7.5 Minute Series, Detroit and Dearborn Quandrangles 1980 and 1983
CITY
Detroit
STATE
Michigan
TDD
S05-9801-020

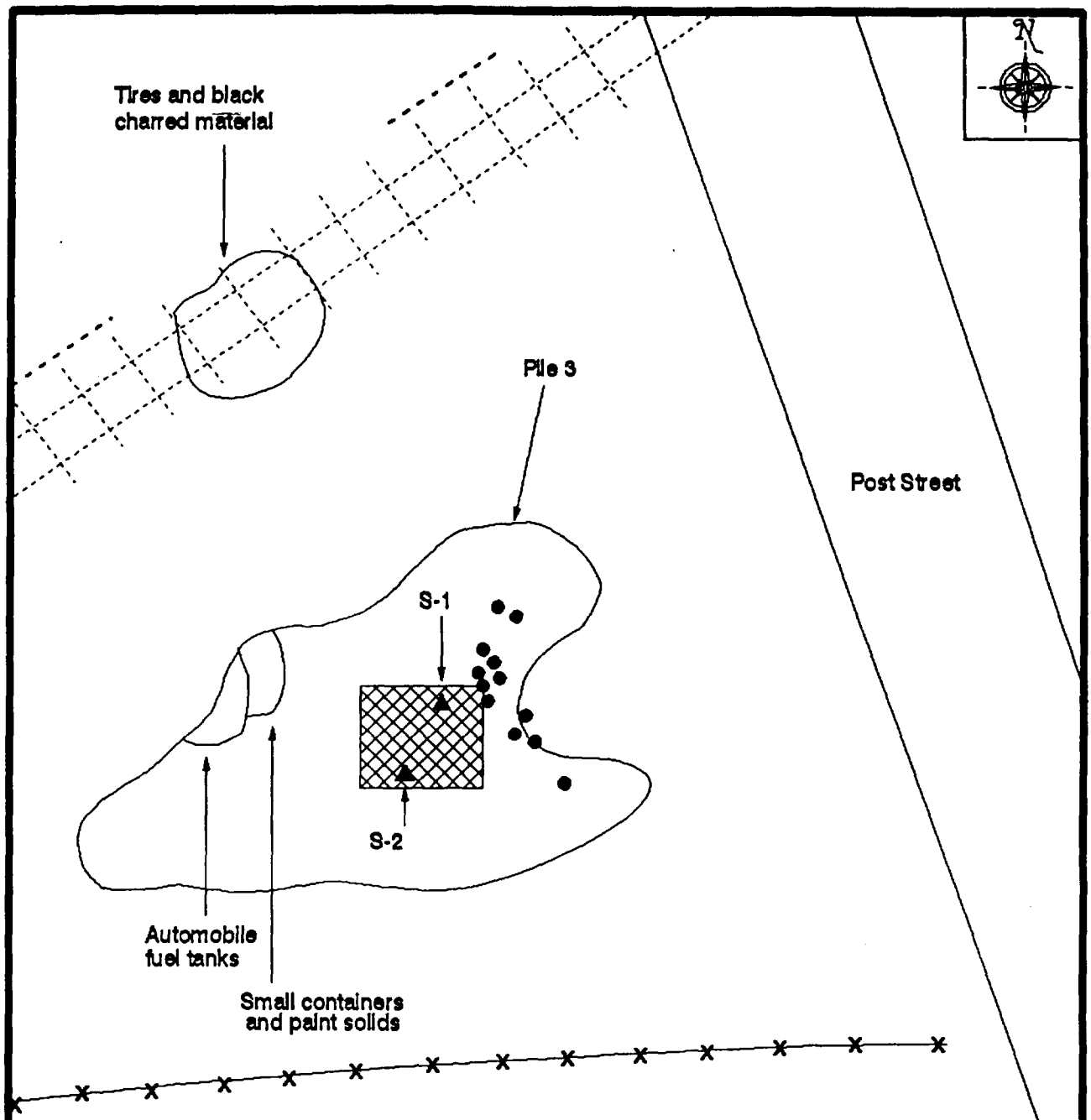


Legend

- Drum
- Sheet metal fencing
- Concrete and iron fencing
- Railroad tracks
- Former railroad tracks
- Chain-link fence
- Property owned by MichCon
- High voltage tower
- Overhead power line

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region 5

TITLE	Site Features Map	FIGURE	2
SITE	MichCon "H"	SCALE	Not to scale
CITY	Detroit STATE Michigan	TDD	S05-9801-020
SOURCE	Ecology and Environment, Inc.	DATE	March 3, 1998



Legend

▲ Soil sample

ecology and environment, inc.
Superfund Technical Assessment and Response Team
Region 5

TITLE: Sample Location Map		FIGURE: 3
SITE: MichCon "H"		SCALE: Not to scale
SOURCE/DATE: Ecology and Environment, Inc. March 9, 1998	CITY: Detroit STATE: Michigan	TDD: S05-9801-020

Attachment C

Data Validation Memoranda

ecology and environment, inc.
12251 UNIVERSAL, TAYLOR, MICHIGAN 48180, TEL. (313) 946-0900
International Specialists in the Environment

MEMORANDUM

DATE: March 2, 1998

TO: Mark Ramaly, START Project Manager, E & E, Taylor, Michigan

FROM: Cheryl L. Elliott, START Chemist, E & E, Taylor, Michigan

THROUGH: Patrick Zwilling, START Assistant Program Manager, E & E, Chicago, Illinois
David Hendren, START Quality Assurance Officer, E & E, Chicago, Illinois

SUBJECT: Polychlorinated Biphenyl (PCB) Data Quality Assurance Review, MichCon "H", Detroit, Wayne County, Michigan

REFERENCE: Project TDD: S05-9801-020 Analytical TDD: S05-9802-803
Project PAN: 8J2001SIXX Analytical PAN: 8FAC01TAXX

The data quality assurance (QA) review of two solid-waste samples, collected from the MichCon "H" site, is complete. The samples were collected on February 6, 1998, by the Superfund Technical Assessment and Response Team (START) contractor, Ecology and Environment, Inc. (E & E). The samples were submitted to Environmental Control Laboratories, Inc., (EC), Strongsville, Ohio, for analyses of PCBs. The laboratory analyses were performed according to the United States Environmental Protection Agency (U.S. EPA) Solid Waste-846 (SW-846) Method 8080 for the determination of PCB concentrations.

Sample Identification

START Identification No.	Laboratory Identification No.
S-1	9802-09003-001
S-2	9802-09003-002

Data Qualifications

I. Holding Time: Acceptable

The samples were collected on February 6, 1998, and received by the laboratory on February 9, 1998. The samples were extracted on February 9, 1998 and analyzed on February 10, 1998. All analyses were completed within the 14 days from collection to extraction and 40 days from extraction to analysis holding time specified in the Office of Solid Waste and Emergency Response (OSWER) Directive 9360.4-01.

II. Instrument Performance: Acceptable

All raw chromatograms were reviewed for adequate peak resolution, and all had adequate resolution between peaks of each Aroclor standard. All retention time windows for the samples and check calibration standards were reported and compared to the standard chromatograms for agreement.

III. Calibration:

A. Initial Calibration: Acceptable

A five-point calibration was performed using an Aroclor 1016/1260 mixture. Percent standard deviations (%RSDs) for each peak of interest was less than or equal to 20%. A standard chromatogram of each of the remaining five reported Aroclors was obtained to aid in pattern recognition.

B. Continuing Calibration: Acceptable

Continuing calibrations were performed for all Aroclors of interest. Percent differences (%D) for all Aroclors were less than or equal to 15%.

IV. Method Blank: Acceptable

Method blanks were analyzed on each day in the proper sequence, and all target compounds were below the instrument detection limits.

V. Compound Identification: Acceptable

The sample chromatograms were compared with standard chromatograms, and sample S-1 appeared to have the associated fingerprint pattern of Aroclor-1254.

VI. Compound Quantitation and Reported Detection Limits: Acceptable

All reported detection limits have been correctly adjusted to reflect dilutions.

VII. Overall Assessment of Data: Acceptable

The overall usefulness of the data is based on the criteria outlined in OSWER Directive 9360.4-01 (April 1990), Data Validation Procedures, Section 7.0, PCBs, and Section 2.7, Quality Assurance Requirements. Based upon the information provided, the data are acceptable for use as reported.

ENVIRONMENTAL CONTROL LABORATORIES INC.

21337 Drake Road
Strongsville, Ohio 44136
(440) 238-6100
FAX: (440) 238-6294

Ms. Karen Dieckhaus
Ecology & Environment

12251 Universal
Taylor, MI 48180

E. C. Lab #: 9802-09003
Received Date: 2/09/98
Report Date: 2/10/98

Purchase Order #:

Subject: KJ5103 / Proj #S05-9802-803 (rush)

Sample No: 001
Client I.D. S-1 (C-1)
Sample Date: 2/06/1998
Matrix: Solid

BNA Extract:
PCB Extract: 2/09/98
Pest Extract:

Analyte	Method	Detection Limit	Results	Units	Analysis Date
POLYCHLORINATED BIPHENYLS					2/10/98
PCB 1016	8082	1000	BDL	mg/Kg	2/10/98
PCB 1221	8082	1000	BDL	mg/Kg	2/10/98
PCB 1232	8082	1000	BDL	mg/Kg	2/10/98
PCB 1242	8082	1000	BDL	mg/Kg	2/10/98
PCB 1248	8082	1000	BDL	mg/Kg	2/10/98
PCB 1254	8082	1000	100000	mg/Kg	2/10/98
PCB 1260	8082	1000	BDL	mg/Kg	2/10/98
TCMX (SURR)			**	41 - 140%	2/10/98

** Surrogate recovery unavailable due to require dilution.

Note:BDL(Below Detection Limit)

Signed:
Robert S. Crookston
Laboratory Director

ENVIRONMENTAL CONTROL LABORATORIES INC.

21337 Drake Road
Strongsville, Ohio 44136
(440) 238-6100
FAX: (440) 238-6294

Ms. Karen Dieckhaus
Ecology & Environment

12251 Universal
Taylor, MI 48180

E. C. Lab #: 9802-09003
Received Date: 2/09/98
Report Date: 2/10/98

Purchase Order #:

Subject: KJ5103 / Proj #S05-9802-803 (rush)

Sample No: 002
Client I.D. S-2 (C-2)
Sample Date: 2/06/1998
Matrix: Solid

BNA Extract:
PCB Extract: 2/09/98
Pest Extract:

Analyte	Method	Detection Limit	Results	Units	Analysis Date
POLYCHLORINATED BIPHENYLS					2/10/98
PCB 1016	8082	1.0	BDL	mg/Kg	2/10/98
PCB 1221	8082	1.0	BDL	mg/Kg	2/10/98
PCB 1232	8082	1.0	BDL	mg/Kg	2/10/98
PCB 1242	8082	1.0	BDL	mg/Kg	2/10/98
PCB 1248	8082	1.0	BDL	mg/Kg	2/10/98
PCB 1254	8082	1.0	BDL	mg/Kg	2/10/98
PCB 1260	8082	1.0	BDL	mg/Kg	2/10/98
TCMX (SURR)			100	41 - 140%	2/10/98

Note:BDL(Below Detection Limit)

Signed:
Robert S. Crookston
Laboratory Director

ENVIRONMENTAL CONTROL LABORATORIES INC.

21337 Drake Road
Strongsville, Ohio 44136
(440) 238-6100
FAX: (440) 238-6294

Ms. Karen Dieckhaus
Ecology & Environment

12251 Universal
Taylor, MI 48180

E. C. Lab #: 9802-09003
Received Date: 2/09/98

QUALITY CONTROL REPORT (SPIKE DATA)

Analyte	Spike Recovery	Spike DUP Recovery	% RPD	Date	Batch #
PCB 1248	87	88	1.1	2/09/98	35892

ENVIRONMENTAL CONTROL LABORATORIES INC.

21337 Drake Road
Strongsville, Ohio 44136
(440) 238-6100
FAX: (440) 238-6294

Ms. Karen Dieckhaus
Ecology & Environment

12251 Universal
Taylor, MI 48180

E. C. Lab #: 9802-09003
Received Date: 2/09/98

QUALITY CONTROL REPORT (BATCH BLANK)

Analyte	Result	Units	Date	Batch #
PCB 1016	<0.001	mg/Kg	2/09/98	35892
PCB 1221	<0.001	mg/Kg	2/09/98	35892
PCB 1232	<0.001	mg/Kg	2/09/98	35892
PCB 1242	<0.001	mg/Kg	2/09/98	35892
PCB 1248	<0.001	mg/Kg	2/09/98	35892
PCB 1254	<0.001	mg/Kg	2/09/98	35892
PCB 1260	<0.001	mg/Kg	2/09/98	35892